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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/592,921 | 09/14/2006 | Colin Christopher David Giles | J3747(C) | 6265 |

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UNILEVER PATENT GROUP
800 SYLVAN AVENUE
AG West S. Wing
ENGLEWOOD CLIFFS, NJ 07632-3100

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| EXAMINER |
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KENNEDY, NICOLETTA

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| ART UNIT | PAPER NUMBER |
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1611

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| NOTIFICATION DATE | DELIVERY MODE |
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05/05/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentgroupus@unilever.com

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/592,921 | Applicant(s) GILES ET AL. | |
| | Examiner Nicoletta Kennedy | Art Unit 1611 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

Claims 1-9 and 11 are currently pending.

Priority

This application, filed September 14, 2006, is a national stage entry of PCT/EP05/01454 filed February 10, 2005, and claims foreign priority to EPO application 04251506.4, filed March 17, 2004. The International Bureau has provided a certified copy of the EPO application.

Maintained Rejections

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. The rejection of claims 1-7, 9 and 11 under 35 U.S.C. 103(a) as being unpatentable over Frantz et al. (US 2003/0190302) (pub. Oct. 9, 2003) in view of Pereira et al. (US 2003/0186834) (pub. Oct. 2, 2003) is maintained.

Applicants' arguments in response to the rejection of claims 1-7, 9 and 11 over Frantz et al. (US 2003/0190302) in view of Pereira et al. (US 2003/0186834) have been fully considered but are not persuasive. With regard to claim 1, Applicants argue that this rejection should be withdrawn for three reasons.

First, applicants argue that there is no teaching or suggestion to combine components 1(a) and 1(c), especially based on the unexpected results demonstrated by applicants. Applicants cite page 26 of the specification for showing that use of small amounts of hydroxyethyl cetyldimonium salt yield superior conditioning and feel. However, these results show no quantitative data and in fact show no results at all, other than a conclusory statement that example 1 has superior conditioning and feel to comparative example A. Further, Applicants argue that while Frantz teach a theoretical mixture of cationic surfactants, there is no working sample showing this combination. MPEP 2123 states that "[a] reference may be relied upon for all that it would have

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reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments” quoting *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), *cert. denied*, 493 U.S. 975 (1989). There is not requirement that a working example be shown for each teaching or suggestion in a prior art reference.

Second, applicants argue that component 1(c) is not taught at the proper amount. Absent quantitative unexpected results, as stated at page 4 of the previous office action, where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.

Third, applicants argue that Pereira teach that the dimonium is either the only cationic used or is the predominant species. However, as stated in the previous office action, Franz teach that quaternary ammonium compounds such as imidazoline derivatives are known cationic surfactants used in the art. Pereira is used to teach the specific dialkyl imidazoline and for the range of from 0.50% to 0.99%. Applicants have calculated (at page 6 of the response), that the amount of dialkyl dimonium is example 9 is 1.0486, just slightly above the 1 % range claimed by applicants. The examiner again points to the cited provision that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. MPEP 2144.05 states: Similarly, a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985).

It is suggested by the examiner that the prior art rejections may be overcome by submitting unexpected results showing evidence of improved conditioning and feel for a composition comprising the components in their respective weight ranges of claim 1.

The results may take the following format to illustrate the necessity of all three components in varied weight ratios:

| | A | B | C | D | E | F | G | H | I | J | K |
|--------------------------------|--------------------|------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|------|--------------------|--------------------|
| Component | Wt % | Wt % | Wt % | Wt % | Wt % | Wt % | Wt % | Wt % | Wt % | Wt % | Wt % |
| 1(a) | 0.2 | 0.5 | .1 | 0.6 | .2 | .2 | .2 | .2 | .2 | .2 | 0 |
| 1(b) | 0.01 | 1 | 0.01 | 0.01 | 0.005 | 1.002 | 0.01 | 0.01 | .01 | 0 | .01 |
| 1(c) | 1×10^{-4} | 0.5 | 1×10^{-4} | 1×10^{-4} | 1×10^{-4} | 1×10^{-4} | 5×10^{-5} | 2×10^{-4} | 0 | 1×10^{-4} | 1×10^{-4} |
| Conditioning (scale of 1-5) | | | | | | | | | | | |
| Feel (scale 1-5) | | | | | | | | | | | |

See MPEP 716 and 716.01(a) for guidelines on consideration of evidence and unexpected results. Applicants are reminded that the evidence must be commensurate with the scope of the claims. See MPEP 716.02(d). This is especially relevant to components 1(a)-1(c) because each component claims multiple species across a range of concentrations, whereas the evidence relied upon in support of nonobviousness is limited to a single example, demonstrating that 0.025 of hydroxyethyl cetyldimonium within the claimed range of 0.0001 to 0.5% and within the genus of cationic surfactants having the formula $[N(CH_3)_2(CH_2CH_2OH)R_2]^+Y^-$ wherein R_2 is a C12-C22 alkyl group and Y is a salt-forming anion selected from halogen, acetate, citrate, lactate, glycolate,

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phosphate, nitrate, sulphate, and methosulphate radicals has superior conditioning and feel. Applicant is reminded that the “objective evidence of nonobviousness must be commensurate in scope with the claims which the evidence is offered to support.” In other words, the showing of unexpected results must be reviewed to see if the results occur over the entire claimed range. *In re Clemens*, 622 F.2d 1029, 1036, 206 USPQ 289, 296 (CCPA 1980). To establish unexpected results over a claimed range, applicants should compare a sufficient number of tests both inside and outside the claimed range to show the criticality of the claimed range. *In re Hill*, 284 F.2d 955, 128 USPQ 197 (CCPA 1960). See also *In re Peterson*, 315 F.3d 1325, 1329-31, 65 USPQ2d 1379, 1382-85 (Fed. Cir. 2003) (data showing improved alloy strength with the addition of 2% rhenium did not evidence unexpected results for the entire claimed range of about 1-3% rhenium). Accordingly, Applicants should provide adequate evidentiary basis for unexpected results commensurate in scope with the claims (e.g., with respect to the claimed ranges as well as the claimed genus of cationic surfactants) or amend the claims commensurate in scope with the evidence offered in support.

With regard to the rejection of claims 2-7, 9 and 11, applicants argue that because the rejection of claim 1 should be withdrawn, the rejection of claims 2-7, 9 and 11 should be withdrawn. Because the examiner is maintaining the rejection of claim 1, the rejection of claims 2-7, 9 and 11 is also maintained.

5. The rejection of claim 8 is under 35 U.S.C. 103(a) as being unpatentable over Frantz et al. (US 2003/0190302) (pub. Oct. 9, 2003) in view of Pereira et al. (US

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2003/0186834) (pub. Oct. 2, 2003) as applied to claims 1-7, 9 and 11 above, and further in view of Minegishi et al. (US 4,102,795) (pub. July 25, 1978) is maintained.

With regard to the rejection of claim 8, applicants argue that because the rejection of claim 1 should be withdrawn, the rejection of claim 8 should be withdrawn. Because the examiner is maintaining the rejection of claim 1, the rejection of claims 8 is also maintained.

Conclusion

No claims are allowable.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicoletta Kennedy whose telephone number is

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(571)270-1343. The examiner can normally be reached on Monday through Thursday 8:15 to 6:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Gollamudi Landau can be reached on 571-272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. K./
Examiner, Art Unit 1611

/David J Blanchard/
Primary Examiner, Art Unit 1643